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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/126,826	07/31/1998	SHUNPEI YAMAZAKI	07977/019002	9346

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EXAMINER	
NGUYEN, DUNG T	
ART UNIT	PAPER NUMBER
2871	

DATE MAILED: 03/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/126,826	Applicant(s) Yamazaki et al.
	Examiner Dung Nguyen	Art Unit 2871

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Dec 18, 2002*.

2a) ☐ This action is **FINAL.** 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *44-48, 51-54, 70, and 72-104* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *44-48, 51-54, 70, and 72-104* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. *08/618,267*.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/18/2002 has been entered.

2. Applicant's amendment dated 011/19/2002 has been received and entered.

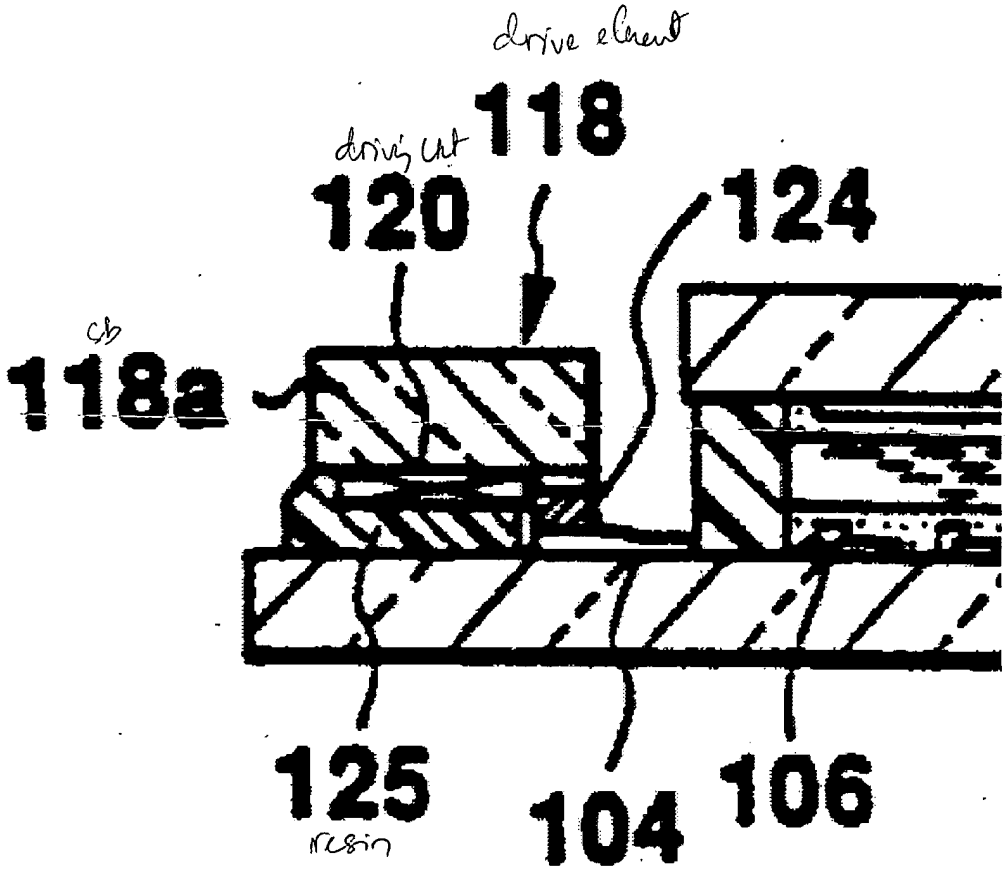
Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 72-83, 90-99 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mawatari et al., US Patent No. 5,200,847, in view of Yamazaki et al., US Patent 5,821,559.

Regarding claims 72-73, 75-79, 81-83, 90-91, 93-96, 93-96 and 98-99, Mawatari et al. disclose an active matrix LCD device (figures 3-4) having:

- a pair of opposed substrate (101, 102);



- a pixel circuit comprising a scanning line (104), a data line (105), a TFT (106) and pixel electrode (107) as claimed; each TFT comprising a channel region crystal silicon (semiconductor 110), a silicon oxide/polyimide passivation (gate insulating 109) (figure 6);

- a liquid crystal material (LC) disposed between the pair of opposed substrate;

- a resin (125) forming on the substrate (101);

- a base film (substrate 118a) in contact with the resin (see enlarged figure 4 reproduced above);

· a driver circuit (120) comprising thin film transistors (TFTs) formed on base film (118a);

· a passivation film inherently covered TFT having a contact hole for electrical connection through a tapered configuration (according to matrix LCD);

Although Mawatari et al. do not explicitly disclose that the driver TFT including a passivation film having a contact hole connected to the pixel TFT by a wiring, it would have been obvious to one skilled in the art to form a driver TFT having a passivation layer and a wiring to connect the pixel TFT from the driver TFT as shown by Yamazaki et al figure 4C in order to drive the pixel TFT in an LCD device.

Regarding claims 74, 80, 92 and 97, although Mawatari et al. do not disclose the substrate can be formed by plastic, one of ordinary skill in the art would have realized the desire to form a substrate in an LCD device can be formed by plastic since it is a common practice in the LCD art. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form a plastic substrate in the Mawatari et al. LCD device in order to decrease the weight and reduce the cost of the LCD device.

It should also be noted that the limitation of claims 76 and 82 recites a one-step process which does not further limit the structure of the claimed reflector. Therefore, the process limitation does not have patentable weight.

5. Claim 44-48, 51-54 and 72 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Mawatari et al., US Patent No. 5,200,847, in view of Yamazaki et al., US Patent 5,821,559, further in view of Sawatsubashi et al., US Patent 5,148,301.

Regarding the above claims, the modification to Mawatari et al. neither discloses a second substrate covering the driver circuit nor a sealing member encloses the pixel circuit and the driver circuit. However, Sawatsubashi et al. do disclose an upper substrate can be covered/overlapped the driver circuit and seal it between two substrate as shown in figures 8 and 11. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to from a sealant between two substrate of an LCD device, so that encloses a pixel circuit and a driver circuit, because it is a common practice in the art to protect the driver circuit from damage as well as to prevent the liquid crystal material from leaking out through such opening.

As noted above, the limitation of claims 45 and 70 recites a one-step process which does not further limit the structure of the claimed reflector. Therefore, the process limitation does not have patentable weight.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed.

Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 44-48, 51-54, 70-104 stand rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 17 and 24 of U.S. Patent No. 5,834,327, as stated in the previous office action.

Response to Arguments

8. Applicant's arguments filed 11/19/2002 have been fully considered but they are not persuasive.

Regarding claims 44, 72, 78, 90 and 95, Applicants contend that both Mawatari et al. and Yamazaki et al. fail to teach a resin formed on the substrate and a base film in contact with the resin as claimed (amendment, page 9). The Examiner is not convinced by this argument since the same is true of the Mawatari et al. driver circuit as noted above (see paragraph 4).

Regarding the double-patenting rejection, Applicants appears to believe that claim 17 (Yamazaki et al., US 5,834,327) fail to disclose the resin or the base film formed in contact with the resin (amendment, page 10). The Examiner, again, respectfully disagrees with the Applicants' viewpoint, and respectfully invited Applicant to review claim 17 which disclose a step of forming an underlying film (i.e., a base film) on a peeling layer and step of attaching driver circuit to one of a liquid crystal substrates with an adhesive (i.e., a resin layer) therebetween, and then etching the peeling layer for separating a semiconductor integrated circuit (formed on the underlying film) from the glass substrate; and one of ordinary skill would be able to merely find such base film would be formed in contact with such resin layer. Accordingly, the rejection of claims 44-48, 51-54, 70-104 under the judicially created doctrine of obviousness-type double patenting proper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dung Nguyen whose telephone number is (703) 305-0423. The Examiner can normally be reached on Monday-Thursday

If attempts to reach the Examiner by telephone are unsuccessful, The Examiner's supervisor, Robert H. Kim can be reached on 703-305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7730 for regular communications and 703-308-7726 for After Final communications.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-0956.

DN
03/08/2003

Dung Nguyen
Patent Examiner
GAU 2871